Unit 5 Data Modelling– Example Data Model Scenario

You are working for East Berkshire Plumbing and Heating Services (EBPHS). They operate a main office with several members of staff, and a dozen engineers who are sent out on jobs each day. The job schedule is currently be recorded in a paper-based system that tracks what jobs are carried out by engineers on a particular day. Jobs can be paid for immediately (paid) or the customer can pay later (pending).

They have a second paper-based system that tracks company expenditures and expenses.

The company wants to store all this information in one place so that they can produce a single report that tracks total income, pending income, total expenditure and total profit.

The company is required to pay HMRC a corporation tax of 20% on all profits that are based on paid for income ***only***.

The company wants you to design a spreadsheet data model that allows EBPHS to track income and expenditure and predict their corporation tax payments to HMRC. In addition, the company want to use this model to work out how to keep their tax payments under £1000.

The company wants as much of the spreadsheet to be as automated as possible. The company wants the sheet to clearly identify inputs and outputs and be as easy to use as possible.

The company wants the sheet to minimize user error where possible.

In addition, the company wants the sheet secured so that only company employees can use it.

The company has identified that it wants four worksheets:

- Worksheet 1 – The Job Sheet.
- Worksheet 2 – The Expenses Sheet.
- Worksheet 3 – The Summary Sheet.
- Worksheet 4 – The Data Sheet.

Details about each worksheet are given on the following pages.

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Worksheet 1 – The Job Sheet.
Worksheet 2 – The Expenses Sheet
Worksheet 3 – The Summary Sheet.
Worksheet 4 – The Data Sheet

You have been given the following sample data to use in your automations:

Job Code	Job Description	Hourly Rate
BS_001	Boiler Service	£50
PF_001	Power Flush Central heating clean	£30
NI_001	New Boiler Installation	£75
NI_002	New Underfloor Heating installation	£120

Tax Code	Tax
1AA	10%
2AA	15%
3AA	20%
1BB	0%

NOTE: although the whole spreadsheet can be edited by the company, EBPHS wants this sheet to be password protected with the code 12345.

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